

Cyclizine – Palliative Care (Adults)

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1. Overview

Purpose

This protocol outlines the administration, prescribing and monitoring of cyclizine for palliative care purposes at Te Whatu Ora - Waitematā.

Scope

All medical and nursing staff.



This guideline is for use in the context of Palliative Care ONLY.

2. Presentation

Cyclizine 50mg tablets

Cyclizine lactate 50mg/ml ampoule for injection.

3. Indications

Licensed:

- Nausea and vomiting including that associated with:
 - motion sickness, narcotic analgesics, general anaesthetics (post-operative) , radiotherapy and Meniere's disease.¹
- Pre-operative use to prevent regurgitation and aspiration of gastric content¹ (raises tone of lower oesophageal sphincter).

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Unlicensed:

- Nausea and vomiting associated with mechanical bowel obstruction and raised intracranial pressure.²

Unlicensed route of administration:

- Subcutaneous use. Cyclizine lactate injection is routinely administered subcutaneously in New Zealand and worldwide.^{2,3}

4. Mechanism of Action

Cyclizine is a histamine H₁ receptor antagonist with antimuscarinic and antiemetic properties.¹ Cyclizine reduces excitability of the inner ear labyrinth and acts directly on the vomiting centre in the brain stem. The onset of action is 30 to 60 minutes and peaks at approximately 2 hours.² It is metabolised mainly by the liver to its metabolite, norcyclizine.⁵

5. Dose

	Route	Dose
Usual starting dose	PO	25-50mg tds (25mg in older adults)
	SC	25-50mg tds (25mg in older adults)
	Continuous subcutaneous infusion (CSCI)	Up to 150mg over 24 hours

Note: PO = oral, SC = subcutaneous. Cyclizine is licensed in New Zealand to a maximum dose of 150mg daily¹ although doses up to 200mg daily can be used in palliative care.²

6. Administration

6.1 Diluent

- For subcutaneous administration cyclizine does not need to be diluted
- When added to a syringe driver the diluent MUST be water for injection.^{2,3}

! Cyclizine is NOT compatible with 0.9% sodium chloride.

6.2 Additional equipment

- Subcutaneous Saf-T-Intima single lumen [ADM140] (See [Te Whatu Ora – Waitematā Policy Palliative Care- Subcutaneous Site Selection, Insertion and Monitoring of BD Saf-T-Intima Cannula](#))
- Continuous subcutaneous infusion pump (Niki T34) if required.

6.3 Compatibility

Note: Cyclizine is incompatible with many drugs. Consider using a separate syringe driver.

Compatible with:

- Water for injection, haloperidol, hyoscine hydrobromide, morphine sulphate, morphine tartrate.^{2,7}

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Concentration-dependant *incompatibility with:*

- Use the following combinations with caution: dexamethasone, midazolam, hyoscine butylbromide, oxycodone, octreotide, clonazepam, fentanyl, metoclopramide.^{2, 4, 5, 7}
- Contact the Palliative Care Team for concentration-specific advice.

Incompatible with:

- 0.9% sodium chloride.



Do not use if the solution is cloudy or a precipitate is present.

6.4 Administration Procedure

- Can be injected directly by a subcutaneous needle or via Saf-T-Intima that has already been placed.
- The Saf-T-Intima should be flushed with 0.2ml of water for injection after administration of medication.
- Can be administered via a continuous subcutaneous infusion pump (Niki T34).

7. Observation and Monitoring

- Monitor for excessive drowsiness.
- Can cause pain and irritation at the injection site.

8. Contraindications and Precautions

Contraindications¹

- Hypersensitivity to cyclizine

Precautions^{1, 2, 6}

- Glaucoma
- Severe heart failure
- Hepatic and renal impairment
- Prostatic hypertrophy
- History of urinary retention
- Epilepsy

9. Possible Adverse Effects

- Drowsiness
- Injection site reactions
- Dryness of the mouth, nose and throat
- Blurred vision
- Tachycardia
- Hypertension
- Hypotension
- Headache
- Oculogyric crisis
- Dystonia
- Twitching
- Muscle spasms
- Urinary retention
- Constipation
- Restlessness
- Nervousness
- Agitation, disorientation
- Insomnia
- Auditory and visual hallucinations

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10. Drug Interactions

- Cyclizine may have additive effects with central nervous system depressants e.g. sedative hypnotics, antipsychotics, alcohol, and opiates.^{2, 5, 7}
- Cyclizine can antagonise the prokinetic effects of metoclopramide.⁵
- Because of its anticholinergic activity cyclizine may enhance the side effects of other anticholinergic agents.¹

11. References

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